## Amend the following claims:

- 1. An apparatus for encoding data in accordance with a fire code  $G(x) = P(x) (1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values b and d for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.
- 6. A method for encoding data in accordance with a fire code  $G(x) = P(x)(1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized int hat the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values b and d for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.
- 7. A method for decoding data in accordance with a fire code  $G(x) = P(x) (1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within

predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values b and d for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.

## Amended claims:

Sul

Q2

1. An apparatus for encoding data in accordance with a fire code  $G(x) = P(x) (1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values D and D for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.

Super

6. A method for encoding data in accordance with a fire code  $G(x) = P(x) (1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized int hat the value for C can be freely set within predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values b and d for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.



7. A method for decoding data in accordance with a fire code  $G(x) = P(x) (1 + x^c)$ , where P(x) is an irreducible polynomial of the degree m, characterized in that the value for C can be freely set within

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predetermined limits and changed so that a code with variable redundancy can be obtained, and the value for C or the values b and d for the error correction and detection properties of the incorporated redundancy are adaptable to the respective quality of the transmission channel.